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**Moss**

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(54) **INTERRUPTIBLE UNIVERSAL WALL BOX AND METHODS OF USE THEREOF**

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(72) Inventor: **J Moss**, Roswell, GA (US)

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This patent is subject to a terminal disclaimer.

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(22) Filed: **Feb. 2, 2016**

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(51) **Int. Cl.**

| | |
|---|---|
| ***H01R 13/60*** | (2006.01) |
| ***H02G 3/18*** | (2006.01) |
| ***H02G 3/16*** | (2006.01) |
| ***H02J 3/00*** | (2006.01) |
| *H01R 24/52* | (2011.01) |
| *H01R 13/639* | (2006.01) |
| *H01R 25/00* | (2006.01) |

(52) **U.S. Cl.**
CPC ..... ***H02G 3/18*** (2013.01); ***H02G 3/16*** (2013.01); ***H02J 3/00*** (2013.01); *H01R 13/6395* (2013.01); *H01R 24/525* (2013.01); *H01R 25/006* (2013.01)

(58) **Field of Classification Search**
None
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

| | | | | |
|---|---|---|---|---|
| 4,756,695 | A * | 7/1988 | Lane | H01R 24/62 439/535 |
| 4,958,048 | A * | 9/1990 | Bell | H02G 3/18 174/53 |
| 8,172,589 | B2 * | 5/2012 | Johnson | H01R 25/16 174/60 |
| 2014/0118892 | A1 * | 5/2014 | Makwinski | H02G 3/26 361/675 |

* cited by examiner

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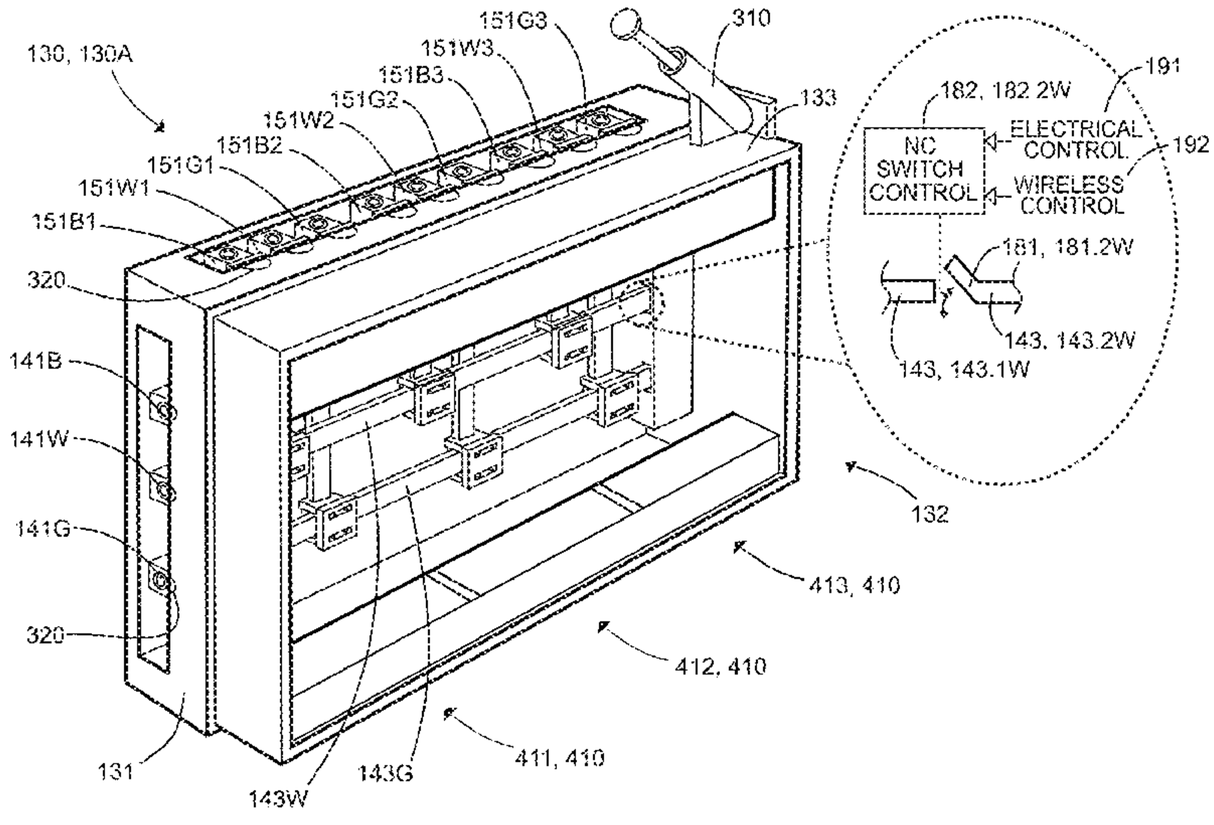
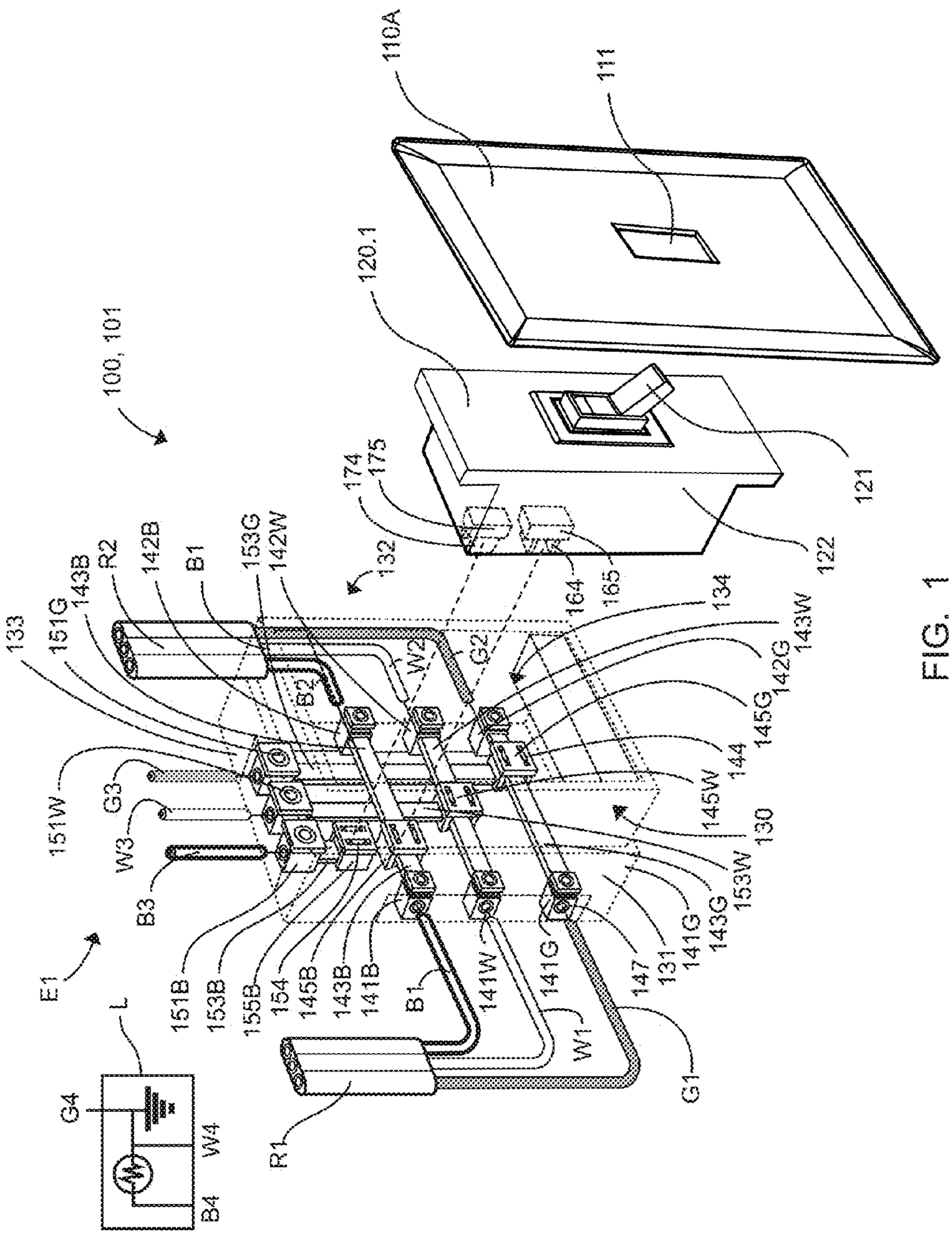
(57) **ABSTRACT**

An electrical wall box having plurality of wire power terminals on exterior of electrical wall box, wire power terminals are electrically connected to one of plurality of insulated distribution busses within electrical wall box, each distribution buses having one or more interrupt bus switches electrically connected therein; each distribution buses has first quick connect terminal electrically connected thereto one distribution buses; wherein electrical wall box further includes plurality of switch wiring terminals on an exterior of electrical wall box, each plurality of switch wiring terminals includes insulated electrical tap connecting one switch wiring terminals to one plurality of internal insulated distribution busses or to quick connect terminal within electrical wall box; one or more pluggable electrical receptacles, each one or more pluggable electrical receptacles includes two or more second quick connect terminals to electrically connect thereto one of said one or more first quick connect terminals; and cover plate.

**33 Claims, 9 Drawing Sheets**

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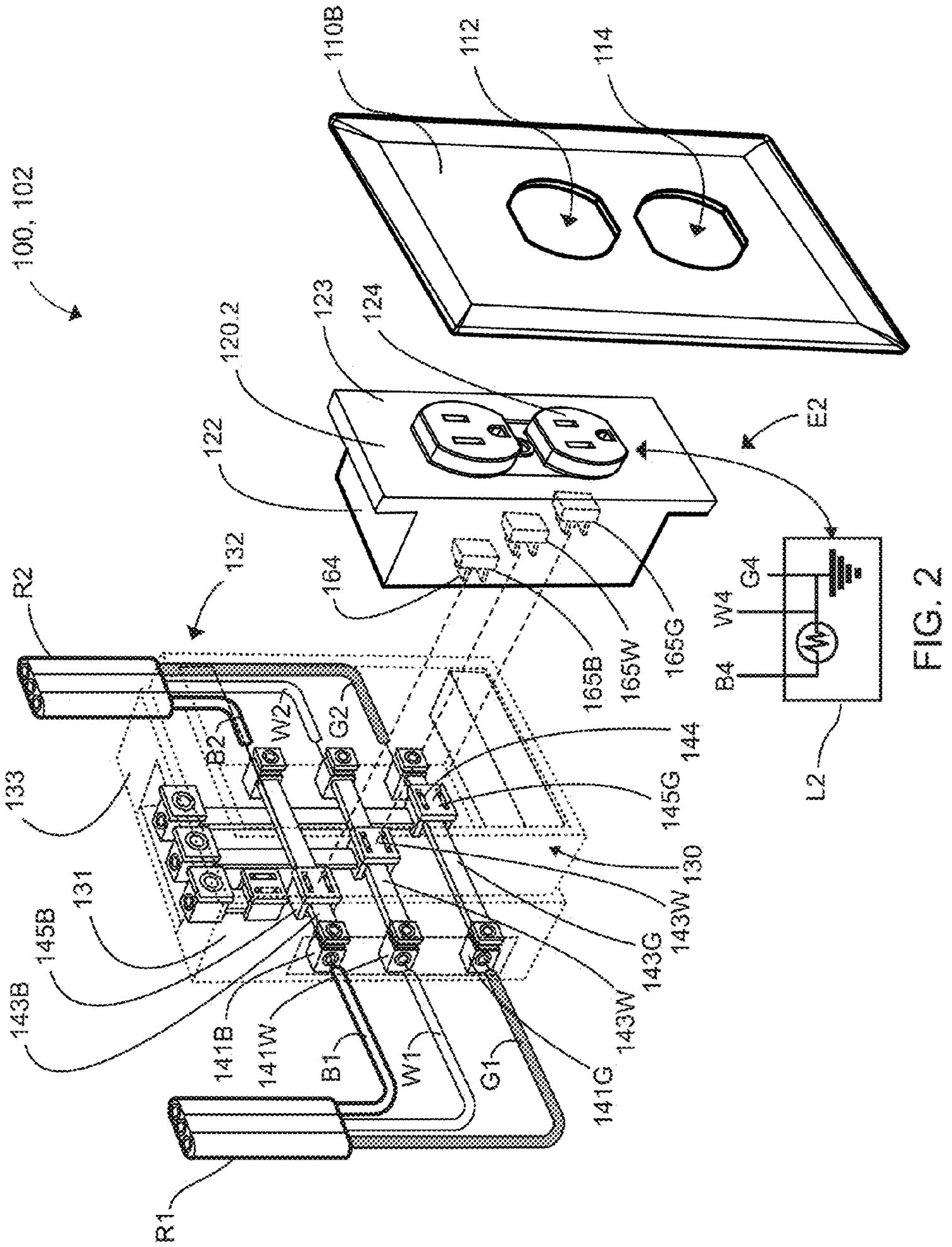
W2
G2
B2
151W
G3
W3
B3
143W
142G
145G
144
145W
130
153W
143G
141G
147
131
141W
151B
153B
155B
154
145B
143B
141B
B1
E1
L
G4
B4
W4
R1
W1
G1
122
121

FIG. 1


100, 102
110B
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R2
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G4
L2
133
131
145B
143B
B2
W2
G2
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143W
143G
141B
141W
B1
W1
G1
141G
143W
R1

FIG. 2

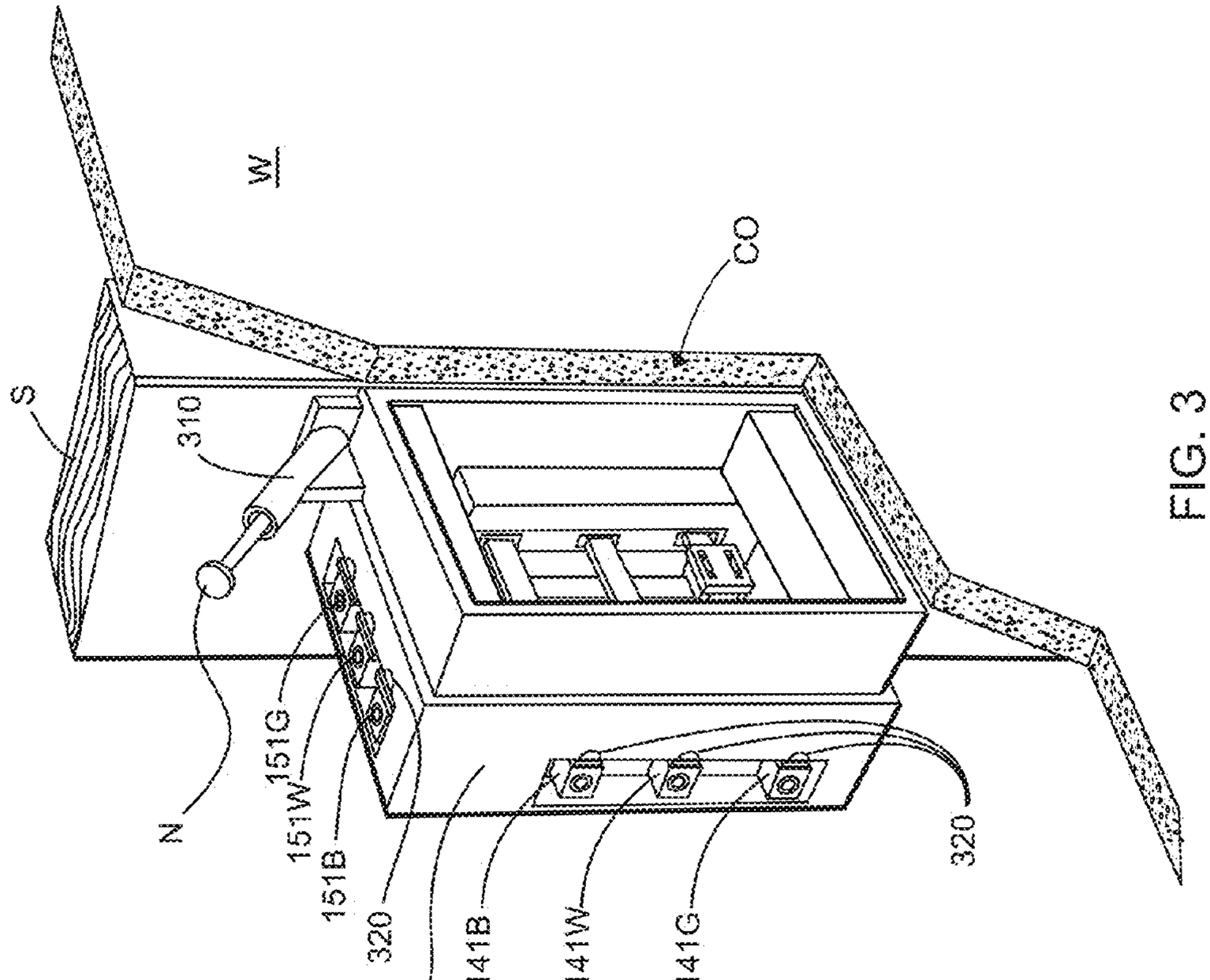



FIG. 3

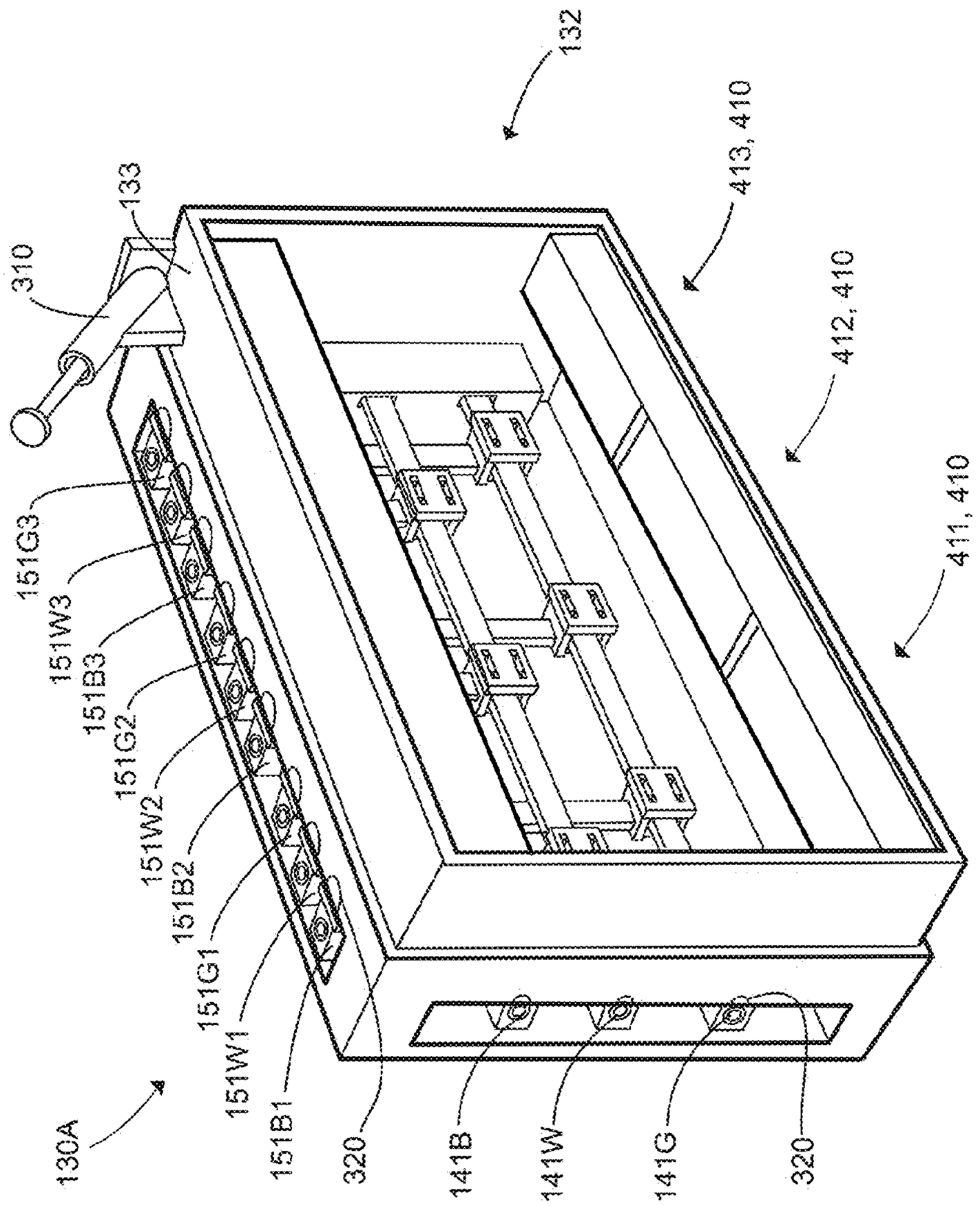

132
413, 410
412, 410
411, 410
310
151G3
151W3
151B3
151G2
151W2
151B2
151G1
151W1
151B1
320
141B
141W
141G
320
130A

FIG. 4

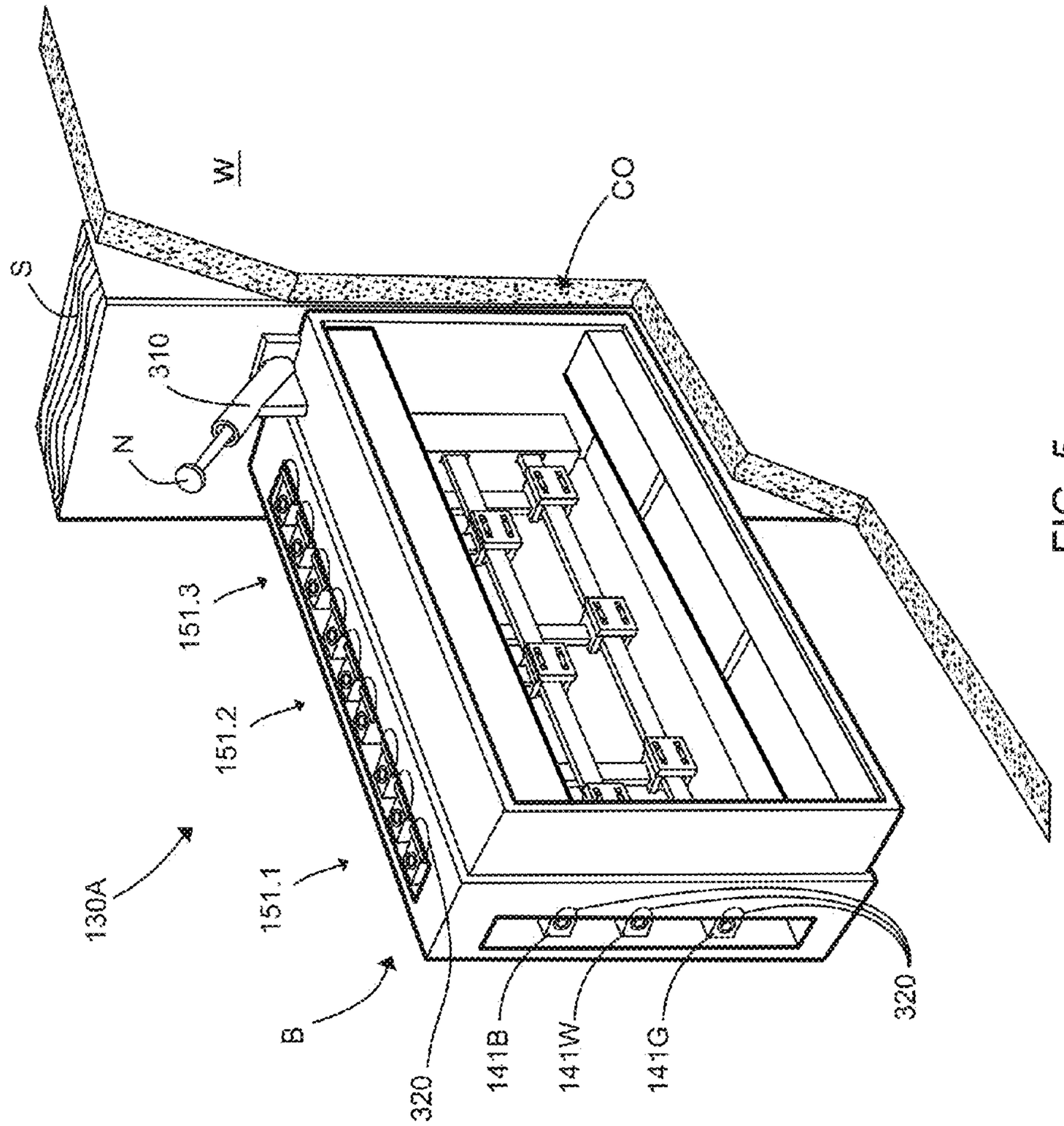
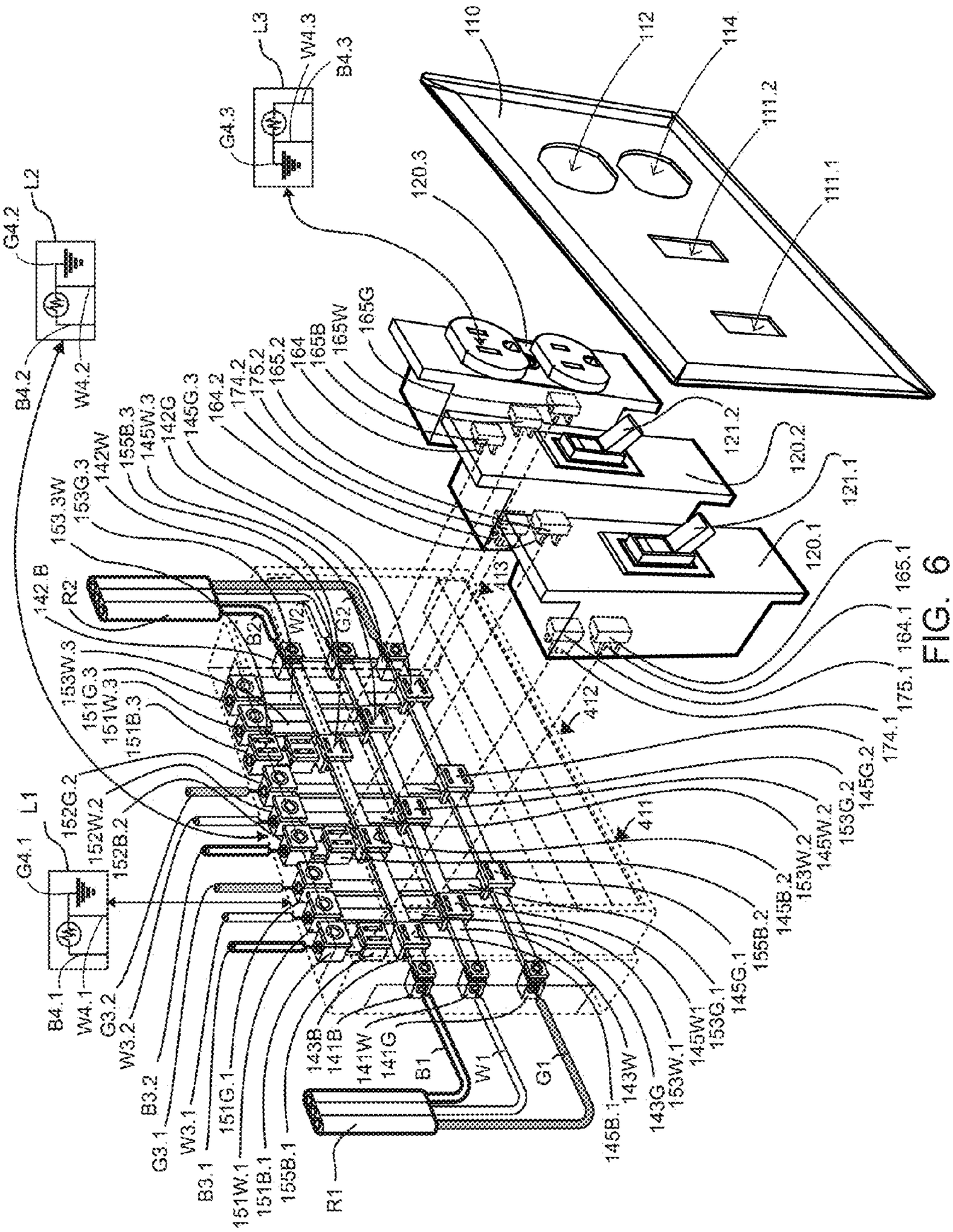



FIG. 5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112
114
111.2
111.1
120.3
L3
W4.3
B4.3
G4.3
L2
G4.2
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W4.2
L1
G4.1
B4.1
W4.1
142.B
R2
153.3W
153G.3
142W
155B.3
145W.3
142G
145G.3
164.2
174.2
175.2
165.2
164
165B
165W
165G
153W.3
151G.3
151W.3
151B.3
152G.2
152W.2
152B.2
B2
W2
G2
413
412
411
121.2
120.2
121.1
120.1
175.1
164.1
165.1
174.1
145G.2
153G.2
145W.2
153W.2
145B.2
155B.2
145G.1
155G.1
145W1
153W.1
143G
143W
145B.1
143B
141B
141W
141G
B1
W1
G1
R1
151B.1
155B.1
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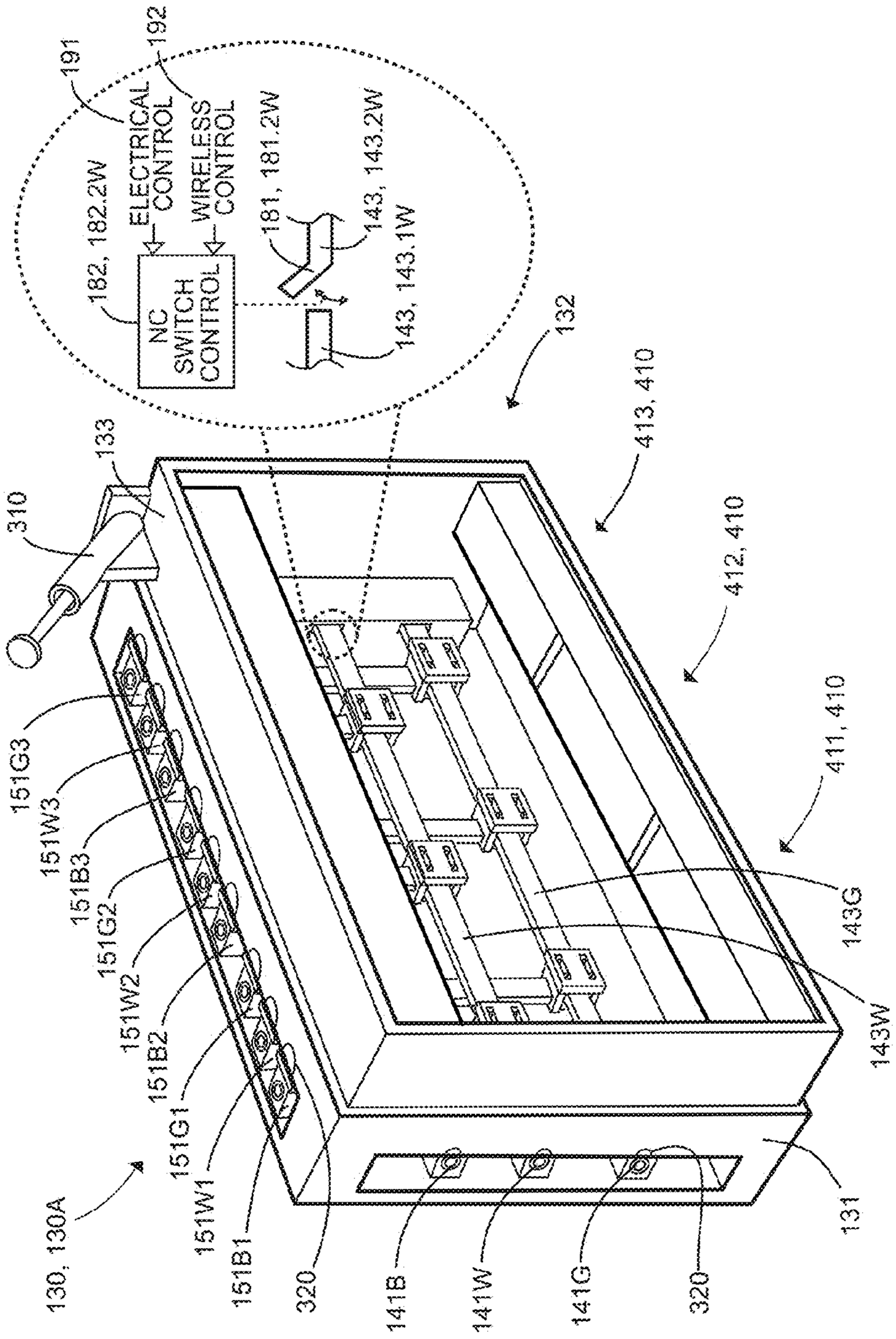
W3.1
B3.1
G3.1
B3.2
W3.2
G3.2

FIG. 6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192
ELECTRICAL CONTROL
WIRELESS CONTROL
182, 182.2W
NC SWITCH CONTROL
181, 181.2W
143, 143.2W
143, 143.1W
132
413, 410
412, 410
411, 410
133
310
151G3
151W3
151B3
151G2
151W2
151B2
151G1
151W1
151B1
130, 130A
320
141B
141W
141G
320
131
143G
143W

FIG. 7

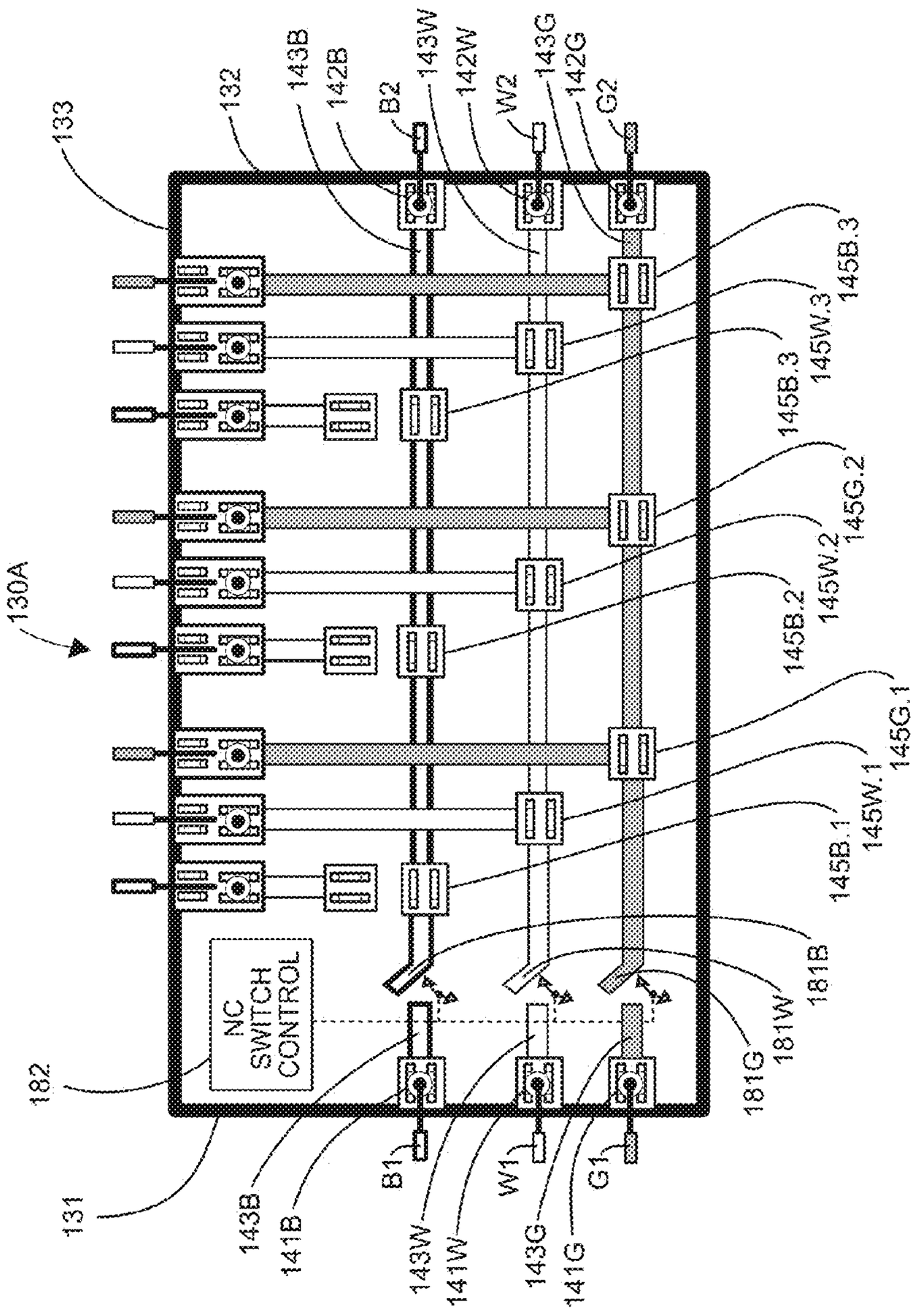
130A
131
132
133
182
NC SWITCH CONTROL
143B
141B
142B
B2
B1
143W
141W
142W
W2
W1
143G
141G
142G
G2
G1
145B.3
145W.3
145G.3
145B.2
145W.2
145G.2
145B.1
145W.1
145G.1
181B
181W
181G

FIG. 8

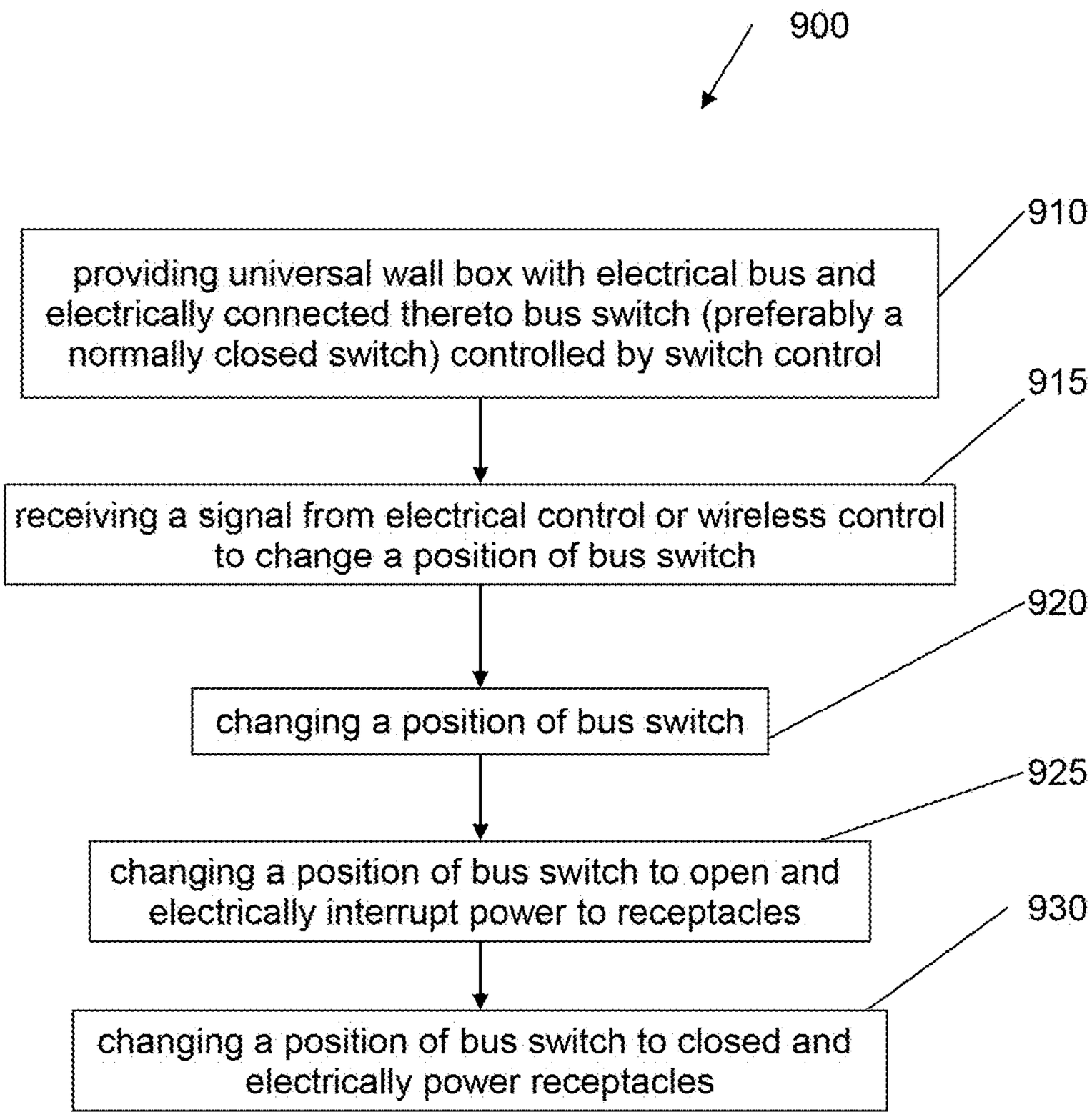
900
910
providing universal wall box with electrical bus and electrically connected thereto bus switch (preferably a normally closed switch) controlled by switch control
915
receiving a signal from electrical control or wireless control to change a position of bus switch
920
changing a position of bus switch
925
changing a position of bus switch to open and electrically interrupt power to receptacles
930
changing a position of bus switch to closed and electrically power receptacles

FIG. 9

# INTERRUPTIBLE UNIVERSAL WALL BOX AND METHODS OF USE THEREOF

## CROSS-REFERENCE TO RELATED APPLICATION

To the full extent permitted by law, the present United States Non-provisional Patent Application is a Continuation-in-Part of United States Non-provisional Application entitled "Plugable Electrical Receptacle and Universal Wall Box and Methods of Use Thereof," having assigned Ser. No. 14/841,064, filed on Aug. 31, 2015, incorporated herein by reference in its entirety.

## FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

None

## PARTIES TO A JOINT RESEARCH AGREEMENT

None

## REFERENCE TO A SEQUENCE LISTING

None

## BACKGROUND

Technical Field of the Invention

The present invention relates generally to electrical receptacles or fixtures, and more specifically to pluggable quick connect electrical receptacles or fixtures and wall box.

Description of Related Art

During construction of buildings, both commercial and residential, it is common to provide an electrical wall box for receiving an electrical receptacle, such as, an outlet or a switch. The electrical wall box is typically secured to the side of a vertical stud. Once the wall box is installed, wallboard is typically installed over the studs and an opening is cut in the wallboard in order to pass the electrical receptacle through the wallboard into the wall box. Electrical wiring from a power source or load enters the wall box via an opening therein, wherein the electrical wiring is accessible from the front of the wall box for electrical connection thereto the electrical receptacle.

To complete the installation of the electrical receptacle, stub wires electrically connected to the electrical receptacle are secured to corresponding wires in the wall box, such as, via wire nuts, or wires in the wall box are directly terminated on the electrical receptacle, such as via screw terminals or friction connect terminals and the electrical receptacle is secured, typically via screws that engage tubular openings (threaded or unthreaded—for self-tapping screws) in the wall box. Subsequently, a decorative cover plate is installed over the receptacle, by securing the cover plate, such as, via screws that engage threaded openings in the electrical receptacle.

Whenever a building is undergoing renovation, the existing receptacles and their cover plates are often in need of replacement or may simply need to be replaced to provide a different appearance or function. Further, it is often necessary to replace a single, defective electrical receptacle.

In order to replace such existing receptacle, power to the box must be interrupted by switching off the power to the wall box. Once the old cover plates and receptacles are electrically disconnected, typically a new receptacle is installed by securing the wires of the new receptacle to their corresponding wires in the wall box (step one), securing the receptacle to the wall box (step two), and, subsequently, securing a new cover plate over the replaced receptacle (step three). All of these steps are labor intensive, such as require considerable skill and manual dexterity to bend and manipulate the heavy gauge power wires and mentally challenging to understand the complex wiring schemes and generally require the services of a licensed electrician, resulting in higher costs than would otherwise be incurred through a simpler apparatus and method of installation.

When installing an electrical receptacle to a wall box, the receptacle has openings for fasteners to engage the wall box receiving apertures. Once the receptacle is installed, the cover plate is secured via fasteners through different openings.

In use, a home or business owner, parent, apartment owner, police, or rescue personnel may wish to interruptible, disable or power down an individual outlet or switch, individual wall box, set of wall boxes, room of wall boxes, unit of wall boxes, floor of wall boxes, building or home of wall boxes.

Therefore, it is readily apparent that there is recognizable unmet need for a pluggable electrical receptacle and universal wall box and methods of use thereof that reduces installation time, wiring complexity to electrically connect a receptacle to a wall box, enable interrupting or disabling of a switch, receptacle, wall box or set of wall boxes.

## BRIEF SUMMARY

Briefly described, in an example embodiment, the present disclosure overcomes the above-mentioned disadvantages and meets the recognized need for a interruptible universal wall box and methods of use thereof, including, in general, includes an electrical wall box having a plurality of wire in and wire out power terminals on an exterior of the electrical wall box, wherein each set of wire in and wire out power terminals are electrically connected to one of a plurality of internal insulated distribution busses within the electrical wall box, each of the distribution buses has one or more first quick connect terminals electrically connected thereto one of the distribution buses; each of the distribution buses having one or more interrupt or disable bus switches electrically connected therein; wherein electrical wall box further includes a plurality of switch wiring terminals on an exterior of the electrical wall box, each of the plurality of switch wiring terminals includes an insulated electrical tap connecting one of the switch wiring terminals to one of the plurality of internal insulated distribution busses or to a quick connect terminal within the electrical wall box; one or more pluggable electrical receptacles, each of the one or more pluggable electrical receptacles includes two or more second quick connect terminals to electrically connect thereto one of said one or more first quick connect terminals; and a cover plate.

According to its major aspects and broadly stated, the present disclosure in its preferred form is a universal electrical wall box capable of electrically quick connecting thereto an interchangeable electrical receptacle, in each slot or bay within the electrical wall box, whether the electrical receptacle is a switch, receptacle (pin or blade style), fan switch, dimmer, decorative switch, wireless switch, occupancy sensor switch, or the like.

Accordingly, a feature of the pluggable electrical receptacle and universal wall box and methods of use thereof is

its ability to provide a pluggable electrical receptacle which requires no particular skill or tools to install or change, and which can be changed without interrupting the power supply to the universal wall box or universal wall boxes down line.

Another feature of the pluggable electrical receptacle and universal wall box and methods of use thereof is its ability to provide wire in and wire out power terminals on the exterior of the box to power and pass power therethrough the electrical wall box on to the next wall box and power internal insulated distribution busses configured to electrically connect with removable electrical receptacles.

Still another feature of the pluggable electrical receptacle and universal wall box and methods of use thereof is the ability to provide switch wiring terminals includes an insulated electrical tap connecting one of the switch wiring terminals on the exterior of the box to power and pass power therethrough to switchable loads, such as lights, fans, electronic devices and the like via insulated electrical taps connecting one of the switch wiring terminals to one of the plurality of internal insulated distribution busses or to a quick connect terminal.

Yet another feature of the pluggable electrical receptacle and universal wall box and methods of use thereof is the ability to avoid the usual crimping and twisting required in conventional power outlets, the universal wall box being configured to receive a removeable plug-in electrical receptacle.

Yet another feature of the pluggable electrical receptacle and universal wall box and methods of use thereof is the ability to avoid the use of a junction device(s) between the universal wall box and pluggable electrical receptacles, whether switch, receptacle (pin or blade style), fan switch, dimmer, decorative switch, wireless switch, occupancy sensor switch, or the like.

Yet another feature of the pluggable electrical receptacle and universal wall box and methods of use thereof is the ability to city or county official's time to conduct a rough electrical inspection due to distinct identification of and separation of switch wiring terminals from wire in and wire out power terminals, thus assisting the inspector with quick identification of wiring configurations.

Yet another feature of the pluggable electrical receptacle and universal wall box and methods of use thereof is the ability to enable an electrician to move from junction box to junction box post inspection or completion of drywall to install electrical receptacles, whether switch, receptacle (pin or blade style), fan switch, dimmer, decorative switch, wireless switch, occupancy sensor switch, or the like.

Yet another feature of the pluggable electrical receptacle and universal wall box and methods of use thereof is the ability to minimize connecting and/or splicing wires using wire nuts.

Yet another feature of the pluggable electrical receptacle and universal wall box and methods of use thereof is the ability to reduce the installation complexity by eliminating the need for jumper wires, so as the number of wires increases, the possibility of incorrectly interconnecting, misterminating, or splicing the wires.

Yet another feature of the pluggable electrical receptacle and universal wall box and methods of use thereof is the ability to reduce the possibility of miswiring the circuit with wire in and wire out power terminals, and plurality of switch wiring terminals on an exterior of the electrical wall box.

In an exemplary embodiment of the pluggable electrical receptacle and universal wall box and methods of use thereof, a universal wall box, said universal wall box comprising an open side electrical box having a plurality of sets of wire in and wire out power terminals integral to an exterior of one or more box surfaces of said electrical box, wherein each said set of wire in and wire out power terminals are electrically connected to one of a plurality of internal insulated distribution busses integrated within said one or more box surfaces of said electrical box, and wherein each of said internal insulated distribution busses includes one or more first quick-connector electrically connected thereto and exposed to an interior of said one or more box surfaces, and a plurality of switch wiring terminals integral to said exterior of said one or more box surfaces of said electrical box, wherein each of said switch wiring terminals are electrically connected to one of a plurality of insulated electrical taps integrated within said one or more box surfaces of said electrical box, and wherein at least one of said plurality of insulated electrical taps includes at least one second quick-connector electrically connected thereto and exposed to an interior of said one or more box surfaces, and wherein each of at least two or more of said plurality of insulated electrical taps is electrically connected to one said plurality of internal insulated distribution busses.

In a further exemplary embodiment the pluggable electrical receptacle and universal wall box and methods of use thereof, a ganged universal wall box, said ganged universal wall box comprising an open side electrical box having a plurality of sets of wire in and wire out power terminals integral to an exterior of one or more box surfaces of said electrical box, wherein each said set of wire in and wire out power terminals are electrically connected to one of a plurality of internal insulated distribution busses integrated within said one or more box surfaces of said electrical box, and one or more bays within said open side electrical box, each said bay includes: one or more first quick-connector electrically connected thereto said internal insulated distribution busses exposed to an interior of said one or more box surfaces, and a plurality of switch wiring terminals integral to said exterior of said one or more box surfaces of said electrical box, wherein each of said switch wiring terminals are electrically connected to one of a plurality of insulated electrical taps integrated within said one or more box surfaces of said electrical box, and wherein at least one of said plurality of insulated electrical taps includes at least one second quick-connector electrically connected thereto and exposed to an interior of said one or more box surfaces, and wherein each of at least two or more of said plurality of insulated electrical taps is electrically connected to one said plurality of internal insulated distribution busses.

In the course of either an initial installation or for remodeling, an electrical wall box/receptacle/cover plate combination is obtained for installation.

Accordingly, a feature pluggable electrical receptacle and universal wall box and methods of use thereof is its ability to reduce labor costs for initial installation and for retrofitting of electrical fittings.

Yet another feature of the pluggable electrical receptacle and universal wall box and methods of use thereof is the ability to reduce the number of stock keeping units for inventory purposes.

Yet another feature of the pluggable electrical receptacle and universal wall box and methods of use thereof is the ability to be quickly installed.

Yet another feature of the pluggable electrical receptacle and universal wall box and methods of use thereof is the ability to be utilized with a variety of electrical components.

Yet another feature of the pluggable electrical receptacle and universal wall box and methods of use thereof is that it requires only simple tools for installation.

Yet another feature of the pluggable electrical receptacle and universal wall box and methods of use thereof is that it is secured via fewer fasteners than is required by typical electrical fixtures.

Yet another feature of the interruptible universal wall box and methods of use thereof is that one or more buses include a disable switch, which preferably is normally closed but can be opened to disable such bus from feeding power to one or more switches or receptacles plugged into the wall box.

Yet another feature of the interruptible universal wall box and methods of use thereof is that a local or remote user may interrupt one or more buses in any wall box to disable one or more switches or receptacles plugged into the wall box.

These and other features of the pluggable electrical receptacle and universal wall box and methods of use thereof will become more apparent to one skilled in the art from the Brief Description of the Drawings, Detailed Description of exemplary embodiments thereof, and Claims when read in light of the accompanying Drawings or Figures.

## BRIEF DESCRIPTION OF THE DRAWINGS

The present pluggable electrical receptacle and universal wall box and methods of use thereof will be better understood by reading the Detailed Description of exemplary embodiments thereof with reference to the accompanying drawing figures, which are not necessarily drawn to scale, and in which like reference numerals denote similar structure and refer to like elements throughout, and in which:

FIG. **1** is a perspective exploded view of an exemplary embodiment of pluggable electrical switch and universal wall box and methods of use thereof, and a switch cover plate;

FIG. **2** is a perspective exploded view of an exemplary embodiment of pluggable electrical outlet and universal wall box and methods of use thereof, and an outlet cover plate;

FIG. **3** is a front perspective view of an exemplary embodiment of a universal wall box, shown affixed to a stud;

FIG. **4** is a front perspective view of an exemplary alternate embodiment of a ganged universal wall box;

FIG. **5** is a front perspective view of an exemplary embodiment of a universal wall box of FIG. **4**, shown affixed to a stud;

FIG. **6** is a perspective exploded view of an exemplary embodiment of pluggable electrical receptacles and ganged universal wall box and methods of use thereof, and ganged cover plate;

FIG. **7** is a perspective exploded view of an exemplary embodiment of the interruptible universal wall box and methods of use thereof, with an exploded view of buss interrupt switch;

FIG. **8** is a front view of an exemplary embodiment of the interruptible universal wall box and methods of use thereof, showing the buss interrupt switch on each bus; and

FIG. **9** is a flow chart depicting an exemplary embodiment of the method of opening and closing a bus switch to electrically power or disable a universal wall box.

It is to be noted that the drawings presented are intended solely for the purpose of illustration and that they are, therefore, neither desired nor intended to limit the disclosure to any or all of the exact details of construction shown, except insofar as they may be deemed essential to the claimed invention.

## DETAILED DESCRIPTION

In describing the exemplary embodiments of the present disclosure, as illustrated in FIGS. **1-8**, specific terminology is employed for the sake of clarity. The present disclosure, however, is not intended to be limited to the specific terminology so selected, and it is to be understood that each specific element includes all technical equivalents that operate in a similar manner to accomplish similar functions. Embodiments of the claimed invention may, however, be embodied in many different forms and should not be construed to be limited to the embodiments set forth herein. The examples set forth herein are non-limiting examples, and are merely examples among other possible examples.

Electrical language used herein may be used interchangeably, such as black-power-hot, white-neutral, and green-ground.

Referring now to FIGS. **1**, **2**, and **6** by way of example, and not limitation, therein is illustrated an example embodiment electrical receptacle assembly **100**, wherein electrical receptacle assembly **100** includes cover plate **110**A, electrical components or receptacles **120**, and a single or multiple bay electrical wall box, such as universal wall box **130**. Preferably, universal wall box **130** is configured as a square or rectangular as a five sided box with an open side, having opening, open side, or interior surface **134**, and relevant sides having interior and exterior surfaces, one or more box surfaces, being first box side **131**, second box side **132**, and third box side **133**. Moreover, exterior surface, such as first box side **131** may include a plurality of power wiring terminals integrated therein, such as first power terminals **141**, which includes first power terminal (in/black/hot/first) **141**B, first power terminal (in/white/neutral/second) **141**W, and first power terminal (in/green/ground/third) **141**G. Furthermore, exterior surface, such as second box side **132** may include a plurality of power terminals integrated therein, such as second power terminals **142**, which includes second power terminal (out/black/hot/first) **142**B, second power terminal (out/white/neutral/second) **142**W, and second power terminal (out/green/ground/third) **142**G. First power terminals **141** and second power terminals **142** may be configured as releasable electrical wire terminals using set screw, spring contact, stab-in or the like electrical wire connectors. Positioned therebetween and electrically connecting each of first power terminals **141** and second power terminals **142** is preferably positioned one or more insulated electrical busses **143**, wherein first insulated electrical bus **143**B is preferably positioned therebetween and electrically connecting first power terminal (black) **141**B thereto second power terminal (black) **142**B, second insulated electrical bus **143**W is preferably positioned therebetween and electrically connecting first power terminal (white) **141**W thereto second power terminal (white) **142**W, and third insulated electrical bus **143**G is preferably positioned therebetween and electrically connecting first power terminal (green) **141**G thereto second power terminal (green) **142**G. Preferably, each of the one or more insulated electrical busses **143** preferably includes first electrical quick-connector or at least three electrical outlet connectors exposed to an interior surface **134**, such as a first electrical quick connector **145** having one or more openings, such as electrical connector access **144** to access an uninsulated portion of one or more insulated electrical busses **143**, such as first electrical or outlet quick connector terminal **145**B electrically connected thereto first insulated electrical bus **143**B, second electrical or outlet quick connector terminal **145**W electrically connected thereto second insulated electrical bus **143**W, and third electrical or outlet quick connector terminal **145**G electrically connected thereto third insulated electrical bus **143**G. It is recognized herein that electrical quick-connectors **145** may be staggered thereon one or more insulated

electrical busses **143** to enable electrical separation therebetween electrical quick connectors **145**.

It is contemplated herein that power wires or wiring, such as ROMEX sets of wire or wiring R having a plurality of individually sheathed or insulated electrical wires therein, such as first power wire (black/hot) B, second power wire (white/neutral) W, and third power wire (green/ground) G, wherein wiring R**1** having first power wire B**1**, second power wire W**1**, and third power wire G**1** is preferably electrically connected such as, first power wire B**1** electrically connects to first power terminal (black) **141**B, second power wire W**1** electrically connects to first power terminal (white) **141**W, and third power wire G**1** electrically connected to first power terminal (green) **141**G. Likewise, wiring R**2** having first power wire B**2**, second power wire W**2**, and third power wire G**2** is preferably electrically connected such as, first power wire B**2** electrically connects to second power terminal (black) **142**B, second power wire W**2** electrically connects to second power terminal (white) **142**W, and third power wire G**2** electrically connects to second power terminal (green) **142**G. Power, neutral, and ground supplied to universal wall box **130** may arrive via either wiring R**1** or wiring R**2** and respectively the other wiring R**2** or wiring R**1**, may power the next wall box in series, and so on, respectively.

Still furthermore, exterior surface, such as third box side **133**, may include a plurality of switch wiring terminals integral therein, such as first switch terminals **151**, which includes first switch terminal (black/hot/first) **151**B, first switch terminal (white/neutral/second) **151**W, and first switch terminal (green/ground/third) **151**G. Switch terminals **151** may be configured as releasable electrical wire terminals using set screw, spring contact, stab-in or the like electrical wire connectors. Switch terminals **151** are preferably electrically connected to an insulated electrical buss, via insulated electrical taps **153**, wherein first insulated electrical tap **153**B is preferably electrically connecting first switch terminal (black) **151**B thereto second electrical quick-connector, such as fourth electrical quick connector terminal **155**B (electrical quick connector **155** includes one or more openings, such as electrical connector access **154** to access an uninsulated portion of one or more first insulated electrical tap **153**, such as first insulated electrical tap **153**B), second insulated electrical tap **153**W is preferably electrically connecting first switch terminal (white) **151**W thereto second insulated electrical bus **143**W, and third insulated electrical tap **153**G is preferably electrically connecting first switch terminal (green) **151**G thereto third insulated electrical bus **143**G. It is recognized herein that electrical quick connectors **155** may be staggered thereon one or more insulated electrical tap **153** to enable electrical separation therebetween electrical quick-connectors **155**/**145**.

It is contemplated herein that electrical quick-connector **145** having electrical connector access **144** and electrical quick connectors **155** having one or more electrical connector access **154**, that such accesses may be oriented or configured differently in order to enable electrical separation or distinction therebetween electrical quick connector **145** and electrical quick connectors **155**, so as to prevent incorrect electrical connections.

It is contemplated herein switch wiring R**3** having first switch wire B**3**, second switch wire W**3**, and third switch wire G**3** is preferably electrically connected such as, first switch wire B**3** electrically connected to first switch terminal (black) **151**B, second switch wire W**3** electrically connected to first switch terminal (white) **151**W, and third switch wire G**3** electrically connected to first switch terminal (green) **151**G. Preferably, first switch wire B**3**, second switch wire W**3**, and third switch wire G**3** power a load or resistance, such as first load L having first wire B**4**, second wire W**4**, and third wire G**4**, wherein first load wire B**4** is preferably electrically connected to first switch wire B**3**, second load wire W**4** is preferably electrically connected to second switch wire W**3**, and third load wire G**4** is preferably electrically connected to third switch wire G**3** to make up or establish an electrical circuit or connection, such as first electrical circuit E**1**.

Referring again to FIG. **1** by way of example, and not limitation, therein is illustrated an example embodiment of electrical switch **120**.**1** and cover plate **110**. Electrical switch **120**.**1** preferably includes toggle **121**, housing or body **122**, and at least two third quick-connectors or electrical switch quick-connectors, such as first electrical switch quick connector **165** and second electrical switch quick connector **175** having one or more electrical contacts or connectors, such as first connector blade **164** and second connector blade **174**, respectively. It is contemplated herein that electrical quick connector **145** having first electrical connector access **144** may mate, plug-in, or make an electrical connection with first connector blade **164** of electrical quick connector **165** and opposite or different oriented electrical quick connectors **155** having second electrical connector access **154** may mate, plug-in, or make an electrical connection with second connector blade **174** of second electrical quick connector **175** to make up or establish an electrical switch **101** as electrical receptacle assembly **100** to switch on and off first electrical circuit E**1**. Preferably, first connector blade **164** and second connector blade **174** may be positioned or oriented different from the other (ninety degrees rotated from the other) to prevent errors in installation of incorrect receptacles **120**. Installation of electrical switch **120**.**1** preferably therein body **122** may be accomplished via, screw and hole, latch, fastener, friction fit, plug in or the like known to one of ordinary skill in the art.

It is recognized herein that cover plate **110** may include aperture **111** to accommodate toggle **121**, and is utilized to cover electrical switch **120**.**1**.

In use, toggle **121** is in a first open position of an open circuit not powering first load L via no circuit connection between first load L (fourth electrical quick connector terminal **155**B and first electrical quick connector terminal **145**B), whereas first load L second wire W**4**, second wire W**3**, first switch terminal (white) **151**W, second insulated electrical tap **153**W, second electrical quick connector terminal **145**W, second insulated electrical bus **143**W is a completed connection to first power terminal (white) **141**W/**142**W and second wire W**1**/W**2**; and third wire G**4**, third wire G**3**, first switch terminal (green) **151**G, third insulated electrical tap **153**G, third electrical quick connector terminal **145**G, third insulated electrical bus **143**G, is a completed connection to first power terminal (green) **141**G/**142**G and third wire G**1**/G**2**.

To complete the circuit and power first load L, toggle **121** is moved to a second closed position of a closed circuit powering first load L via first wire B**4**, first wire B**3**, first switch terminal (black) **151**B, first insulated electrical tap **153**B, fourth electrical quick connector terminal **155**B, electrical quick connector **175**, electrical quick connector **165**, first electrical quick connector terminal **145**B, first insulated electrical bus **143**B is a completed connection to first power terminal (black) **141**B/**142**B and first wire B**1**/B**2**.

Referring again to FIG. **2** by way of example, and not limitation, therein is illustrated an example embodiment of

electrical outlet **120.2** and cover plate **110**B. Electrical outlet **120.2** preferably includes plug receptacles **123**/**124**, housing or body **122**, and one or more electrical quick connectors **165**, such as electrical quick connector (black) **165**B, electrical quick connector (white) **165**W, and electrical quick connector (green) **165**G having electrical connector **164**. It is contemplated herein that electrical quick connector **145** having electrical connector access **144** may mate, plug-in, or make an electrical connection with electrical connector **164** of electrical quick connector **165** to make up or establish an electrical receptacle **102** as electrical receptacle assembly **100** to switch on and off second electrical circuit E**2**. Installation of electrical switch **120.2** preferably therein universal wall box **130** may be accomplished via, screw and hole, latch, fastener, friction fit, plug-in or the like known to one of ordinary skill in the art.

In use, first load L first wire B**4**, first wire B**3**, electrical quick connector (black) **165**B, first electrical quick connector terminal **145**B, first insulated electrical bus **143**B is a completed connection to first power terminal (black) **141**B/**142**B and first wire B**1**/B**2**; second wire W**4**, second wire W**3**, electrical quick connector (white) **165**W, second electrical quick connector terminal **145**W, second insulated electrical bus **143**W is a completed connection to first power terminal (white) **141**W/**142**W and second wire W**1**/W**2**; and third wire G**4**, third wire G**3**, electrical quick connector (green) **165**G, third electrical quick connector terminal **145**G, third insulated electrical bus **143**G, is a completed connection to first power terminal (green) **141**G/**142**G and third wire G**1**/G**2**.

Referring now to FIG. **3** by way of example, and not limitation, therein is illustrated an example embodiment universal wall box **130**, wherein universal wall box **130** includes one or more attachment devices, such as nail receiver **310** affixed or integrated therein a side of universal wall box **130**, such as first box side **131**, second box side **132**, or third box side **133**. It is recognized herein that other attachment devices may be utilized, such as flaps to hold universal wall box **130** within or behind a wall board, such as drywall W. In use, a screw or nail N may be utilized to attach universal wall box **130** thereto a wall support, such as stud S within a cut out CO of drywall W. Moreover, the plurality of power terminals integrated therein, such as first power terminals **141**, which includes first power terminal (black) **141**B, first power terminal (white) **141**W, and first power terminal (green) **141**G of first box side **131** and similarly for second box side **132** and the plurality of switch terminals integrated therein, such as first switch terminals **151**, which includes first switch terminal (black) **151**B, first switch terminal (white) **151**W, and first switch terminal (green) **151**G of third box side **133**, may include a group access or individual access, such as notch **320** configured to enable a user to tighten or release set screw, spring contact, stab-in or the like electrical wire connectors.

Referring now to FIG. **4** by way of example, and not limitation, therein is illustrated an example embodiment ganged universal wall box **130**A, wherein ganged universal wall box **130**A includes one or more slots, such as bays **410** and in this example includes one or more bays, such as first bay **411**, second bay **412**, and third bay **413** to accommodate one selected of one or more electrical components or receptacles **120** whether electrical switch **120.1**, electrical outlet **120.2**, or the like in any given bay **410**. Furthermore, bays **410** are configured to be powered by first power terminals **141**, which includes first power terminal (black) **141**B, first power terminal (white) **141**W, and first power terminal (green) **141**G of first box side **131** and second power terminal (black) **142**B, second power terminal (white) **142**W, and second power terminal (green) **142**G of second box side **132** and their respective busses one or more insulated electrical busses **143**, including first insulated electrical bus **143**B, second insulated electrical bus **143**W, and third insulated electrical bus **143**G. Still furthermore, sets of plurality of switch terminals may be integrated therein third box side **133** to accommodate bays **410** switch configurations, such as for bay **411** first switch terminals **151.1**, which includes first switch terminal (black) **151**B**1**, first switch terminal (white) **151**W**1**, and first switch terminal (green) **151**G**1**; for bay **412** second switch terminals **151.2**, which includes second switch terminal (black) **151**B**2**, second switch terminal (white) **151**W**2**, and second switch terminal (green) **151**G**2**; and for bay **413** third switch terminals **151.3**, which includes third switch terminal (black) **151**B**1**, third switch terminal (white) **151**W**2**, and third switch terminal (green) **151**G**3**, and so on.

Referring now to FIG. **5** by way of example, and not limitation, therein is illustrated an example embodiment of ganged universal wall box **130**A, wherein ganged universal wall box **130**A includes one or more attachment devices, such as nail receiver **310** affixed or integrated therein a side of ganged universal wall box **130**, such as first box side **131**, second box side **132**, or third box side **133**. It is recognized herein that other attachment devices may be utilized, such as flaps to hold ganged universal wall box **130**A within or behind a wall board, such as drywall W. In use, a screw or nail N may be utilized to attach ganged universal wall box **130** thereto a wall support, such as stud S within a cut out CO of drywall W. Moreover, the plurality of power terminals, first power terminals **141** and second power terminals **142**, and first switch terminals **151.1** second switch terminals **151.2**, third switch terminals **151.3** may include a group access or individual access, such as notch **320** configured to enable a user to tighten or release set screw, spring contact, stab-in or the like electrical wire connectors.

Referring again to FIGS. **1**, **2** and **6** by way of example, and not limitation, therein is illustrated an example embodiment of ganged universal wall box **130**A, with an interchangeable variety of electrical components or receptacles **120**, such as electrical switch **120.1**, electrical switch **120.2**, and electrical outlet **120.3** and cover plate **110**C. Electrical switch **120.1** is preferably wired similar to electrical switch **120.1** of FIG. **1**, wherein numbering is preferably xxx.1. Installation of electrical switch **120.1** is preferably therein bay **411** of ganged universal wall box **130**A. Electrical switch **120.2** is preferably wired similar to electrical switch **120.1** of FIG. **1**, wherein numbering is preferably xxx.2. Installation of electrical switch **120.2** is preferably therein bay **412** of ganged universal wall box **130**A. Electrical outlet **120.3** is preferably wired similar to electrical outlet **123** of FIG. **2**, wherein numbering is preferably xxx.3. Installation of electrical outlet **120.3** preferably therein bay **413** of ganged universal wall box **130**A.

Still furthermore, third box side **133**, may include a plurality of switch terminals integrated therein, such as second/third (and so on) switch terminals **151**, which includes second switch terminal (black) **151**B.**2**, second switch terminal (white) **151**W.**2**, and second switch terminal (green) **151**G.**2**. Switch terminals **151** are preferably electrically connected to an insulated electrical buss, via insulated electrical tap **153**, wherein first insulated electrical tap **153**B.**2** is preferably electrically connecting second switch terminal (black) **151**B.**2** thereto fourth electrical quick connector terminal **155**B.**2**, second insulated electrical tap **153**W.**2** is preferably electrically connecting second switch

terminal (white) **151**W.**2** thereto second insulated electrical bus **143**W, and third insulated electrical tap **153**G.**2** is preferably electrically connecting second switch terminal (green) **151**G.**2** thereto third insulated electrical bus **143**G. It is recognized herein that electrical quick-connectors **155** may be staggered thereon one or more insulated electrical tap **153** to enable electrical separation therebetween electrical quick-connectors **155**/**145**.

It is contemplated herein wiring R**3**.**2** having first wire B**3**.**2**, second wire W**3**.**2**, and third wire G**3**.**2** is preferably electrically connected such as, first wire B**3**.**2** electrically connected to second switch terminal (black) **151**B.**2**, second wire W**3**.**2** electrically connected to second switch terminal (white) **151**W.**2**, and third wire G**3**.**2** electrically connected to second switch terminal (green) **151**G.**2**. Preferably, first wire B**3**.**2**, second wire W**3**.**2**, and third wire G**3**.**2** power a load or resistance, such as second load L**2** having first wire B**4**.**2**, second wire W**4**.**2**, and third wire G**4**.**2**, wherein first wire B**4**.**2** is preferably electrically connected to first wire B**3**.**2**, second wire W**4**.**2** is preferably electrically connected to second wire W**3**.**2**, and third wire G**4**.**2** is preferably electrically connected to third wire G**3**.**2** to make up or establish an electrical circuit or connection, such as second electrical circuit E**2**.

Specifically, electrical switch **120**.**2** preferably includes toggle **121**.**2**, housing or body **122**.**2**, and one or more electrical quick-connectors, such as electrical quick connector **165**.**2** and electrical quick connector **175**.**2** having electrical connector **164**.**2** and electrical connector blade **174**.**2**, respectively. It is contemplated herein that electrical quick connector **145**B.**2** having electrical connector access **144** may mate, plug-in, or make an electrical connection with electrical connector **164**.**2** of electrical quick connector **165**.**2**; and opposite or different oriented electrical quick connectors **155**B.**2** having electrical connector access **154** may mate, plug-in, or make an electrical connection with electrical connector blade **174**.**2** of electrical quick connector **175**.**2** to make up or establish an electrical switch **103** as electrical receptacle assembly **100** to switch on and off second electrical circuit E**2**. Installation of electrical switch **120**.**2** preferably therein bay **2** of ganged universal wall box **130**A may be accomplished via, screw and hole, latch, fastener, friction fit, plug-in or the like known to one of ordinary skill in the art.

It is recognized herein that cover plate **110**C may include aperture **111**.**2** to accommodate toggle **121**.**2**, and is utilized to cover electrical switch **120**.**2**.

In use, toggle **121**.**2** is in a first open position of an open circuit not powering second load L**2** via no circuit connection between second load L**2** (fourth electrical quick connector terminal **153**B.**2** and first electrical quick connector terminal **145**B.**2**), whereas second load L**2**, second wire W**4**.**2**, second wire W**3**.**2**, second switch terminal (white) **151**W.**2**, second insulated electrical tap **153**W.**2**, second electrical quick connector terminal **145**W.**2**, second insulated electrical bus **143**W is a completed connection to first power terminal (white) **141**W/**142**W and second wire W**1**/W**2**; and third wire G**4**.**2**, third wire G**3**.**2**, second switch terminal (green) **151**G.**2**, third insulated electrical tap **153**G.**2**, third electrical quick connector terminal **145**G.**2**, third insulated electrical bus **143**G, is a completed connection to first power terminal (green) **141**G/**142**G and third wire G**1**/G**2**.

To complete the circuit and power second load L**2**, toggle **121** is moved to a second closed position of a closed circuit powering second load L**2** via first wire B**4**.**2**, first wire B**3**.**2**, first switch terminal (black) **151**B.**2**, first insulated electrical tap **153**B.**2**, fourth electrical quick connector terminal **155**B.**2**, electrical quick connector **175**.**2**, electrical quick connector **165**.**2**, first electrical quick connector terminal **145**B.**2**, first insulated electrical bus **143**B is a completed connection to first power terminal (black) **141**B/**142**B and first wire B**1**/B**2**.

Power, neutral, and ground supplied to universal wall box **130** may be arrive via either wiring R**1** or wiring R**2** and respectively the other wiring R**2** or wiring R**1**, may power the next wall box in series, and so on, respectively.

It is contemplated herein that a variety of configurations of universal wall box **130**, such as single, 2× (double), 3× (triple) 4× (quad), or other multi-ganged bays of universal wall box **130**, and may be utilized to accommodate, whether for commercial or residential, wiring and hook-up capabilities for a variety of configurations of electrical components or receptacles **120**, such as electrical switch **120**.**1**, electrical switch **120**.**2**, and electrical outlet **120**.**3** and the like.

It is contemplated herein that ganged receptacles **120**, such as electrical switch **120**.**1**, electrical switch **120**.**2**, and electrical outlet **120**.**3** and the like may contain any mix or combination of receptacles **120**, such as electrical switch **120**.**1**, electrical switch **120**.**2**, and electrical outlet **120**.**3** whether switch, receptacle (pin or blade style), fan switch, dimmer, decorative switch, wireless switch, occupancy sensor switch, or the like and any combination thereof. Moreover, receptacles **120** may include electrical components meeting U.L., U.S. and foreign standard or requirements, such as 110V/120V, 220V/240V, grounded, not grounded, and the like.

It is recognized herein that cover plate **110** may include apertures **111**.**1**/**111**.**2**/**112**/**114** to accommodate receptacles **123**/**124**, and is utilized to cover receptacles **120**. Cover plate(s) **110** preferably includes throughholes are dimensioned to receive fasteners therethrough to removeably affix cover plate(s) **110** thereto receptacles **120**.

It is contemplated herein that in universal wall box **130** and its sub components, including standard power supplies meeting U.L., U.S. and foreign standard or requirements, such as 110V/120V, 220V/240V, 277V, 480V and the like.

It is recognized herein that use of universal wall box **130** may increase the safety and to simplify wiring a set of receptacles **120**.

It is contemplated herein that universal wall box **130** may contain any mix or combination of receptacles **120**, such as electrical switch component and/or electrical receptacle components whether switch, receptacle (pin or blade style), fan switch, dimmer, decorative switch, wireless switch, occupancy sensor switch, or the like and any combination thereof.

Referring now to FIG. **7** by way of example, and not limitation, therein is illustrated an example embodiment ganged universal wall box **130**A, wherein ganged universal wall box **130**A includes one or more slots, such as bays **410** and in this example includes one or more bays, such as first bay **411**, second bay **412**, and third bay **413** to accommodate one selected of one or more electrical components or receptacles **120** whether electrical switch **120**.**1**, electrical outlet **120**.**2**, or the like in any given bay **410**. Furthermore, bays **410** are configured to be powered by first power terminals **141**, which includes first power terminal (black) **141**B, first power terminal (white) **141**W, and first power terminal (green) **141**G of first box side **131** and second power terminal (black) **142**B, second power terminal (white) **142**W, and second power terminal (green) **142**G of second box side **132** (shown in FIG. **6**) and their respective busses one or more insulated electrical busses **143**, including first

insulated electrical bus **143**B (shown in FIG. **6**), second insulated electrical bus **143**W, and third insulated electrical bus **143**G. Still furthermore, sets of plurality of switch terminals may be integrated therein third box side **133** to accommodate bays **410** switch configurations, such as for bay **411** first switch terminals **151.1**, which includes first switch terminal (black) **151**B**1**, first switch terminal (white) **151**W**1**, and first switch terminal (green) **151**G**1**; for bay **412** second switch terminals **151.2**, which includes second switch terminal (black) **151**B**2**, second switch terminal (white) **151**W**2**, and second switch terminal (green) **151**G**2**; and for bay **413** third switch terminals **151.3**, which includes third switch terminal (black) **151**B**1**, third switch terminal (white) **151**W**2**, and third switch terminal (green) **151**G**3**, and so on.

Furthermore, ganged universal wall box **130**/**130**A may include one or more interrupt, disrupt, or on/off switch, such as bus switch **181**. Bus switch **181** may be positioned or incorporated anywhere along and electrically integrated in any of the one or more insulated electrical busses **143** (single switch bus), and alternatively one or more bus switch **181** may be positioned or incorporated anywhere along and electrically integrated in any of the one or more insulated electrical busses **143** (multi-switch bus), such as first insulated electrical bus **143**B, second insulated electrical bus **143**W, or third insulated electrical bus **143**G. For example, bus switch **181** may be positioned in or proximate bays **410** including one or more bays, such as first bay **411**, second bay **412**, and third bay **413** to enable electrical interrupt, disrupt, disconnect, or on/off switch capability for individual bays **410** and interchangeable variety of electrical components or receptacles **120**, such as electrical switch **120.1**, electrical switch **120.2**, and electrical outlet **120.3** electrically connected therein each of bays **410** shown in FIG. **6**.

Referring again to FIG. **7** by way of example, and not limitation, therein is illustrated in an exploded view an example embodiment of bus switch **181** shown in an open position however, bus switch **181** preferably includes a normally closed bus switch capable of opening and closing to interrupt or connect one of insulated electrical busses **143** (multi-switch bus) therein ganged universal wall box **130**A/**130**, such as first insulated electrical bus **143**B, second insulated electrical bus **143**W, or third insulated electrical bus **143**G. Bus switch **181** may be controlled by a controller, control a position or state of, change a position, such as switch control **182** having control inputs via a wired control signal, such as electrical control **191** or via wireless communication signal (wireless access, Bluetooth or other IEEE standard), such as wireless control **192**. Preferably switch control **182** receives a signal from electrical control **191** or wireless control **192** and processes such with memory and a central processing unit, to electrically open or close (position) bus switch **181** and switch control **182** electrically opens or closes (change position) bus switch **181**, respectively. For example, if switch control **182.2**W receives a signal from electrical control **191** or wireless control **192** to open bus switch **181.2**W then switch control **182.2**W opens bus switch **181.2**W, thus interrupting second insulated electrical bus **143.1**W from second insulated electrical bus **143.2**W and electrically disrupting power to one or more electrical components or receptacles **120** whether electrical switch **120.1**, electrical outlet **120.2** electrically connected therein each of bays **410** shown in FIG. **6**. Alternatively if switch control **182.2**W receives a signal from electrical control **191** or wireless control **192** to open bus switch **181.2**W then switch control **182.2**W opens bus switch **181.2**W, thus connecting second insulated electrical bus **143.1**W to second insulated electrical bus **143.2**W and powering one or more electrical components or receptacles **120** whether electrical switch **120.1**, electrical outlet **120.2** electrically connected therein each of bays **410** shown in FIG. **6**.

It is contemplated herein that one or more electrical components or receptacles **120** whether electrical switch **120.1**, electrical outlet **120.2** electrically connected therein each of bays **410** shown in FIG. **6** may include internet, phone, or other communication cable as receptacles **120** wherein switch control **182** opening or closing of receptacles **120** interrupts or provides service of internet, phone, or other communication cable via ganged universal wall box **130**A/**130**.

It is further contemplated herein that switch control **182** may be controlled via internet with an IP addressable ganged universal wall box **130**A/**130** or wireless with transmit and receive functionality communicating directly with a device such as a smart phone, tablet, laptop, computer or the like communicating via smart phone application or website communicating through electrical control **191** or wireless control **192** or communicating with such devices via wireless connection to the Internet.

It is still further contemplated herein that user(s) whether home or business owner, parent, apartment owner, police, rescue personnel or the like may interrupt, disable or power down electrical components or receptacles **120**, individual ganged universal wall box **130**A/**130**, set of ganged universal wall box **130**A/**130**, room of ganged universal wall box **130**A/**130**, unit of ganged universal wall box **130**A/**130**, floor of ganged universal wall box **130**A/**130**, building or home ganged universal wall box **130**A/**130**.

Referring again to FIG. **8** by way of example, and not limitation, therein is illustrated an example embodiment of ganged universal wall box **130**A, capable of receiving an interchangeable variety of electrical components or receptacles **12**. Ganged universal wall box **130**A may include first box side **131**, second box side **132**, and third box side **133**.

Moreover, exterior surface, such as first box side **131** may include a plurality of power wiring terminals integrated therein, such as first power terminals **141**, which includes first power terminal (in/black/hot/first) **141**B, first power terminal (in/white/neutral/second) **141**W, and first power terminal (in/green/ground/third) **141**G. Furthermore, exterior surface, such as second box side **132** may include a plurality of power terminals integrated therein, such as second power terminals **142**, which includes second power terminal (out/black/hot/first) **142**B, second power terminal (out/white/neutral/second) **142**W, and second power terminal (out/green/ground/third) **142**G. First power terminals **141** and second power terminals **142** may be configured as releasable electrical wire terminals using set screw, spring contact, stab-in or the like electrical wire connectors. Positioned therebetween and electrically connecting each of first power terminals **141** and second power terminals **142** is preferably positioned one or more insulated electrical busses **143**, wherein first insulated electrical bus **143**B is preferably positioned therebetween and electrically connecting first power terminal (black) **141**B thereto second power terminal (black) **142**B, second insulated electrical bus **143**W is preferably positioned therebetween and electrically connecting first power terminal (white) **141**W thereto second power terminal (white) **142**W, and third insulated electrical bus **143**G is preferably positioned therebetween and electrically connecting first power terminal (green) **141**G thereto second power terminal (green) **142**G. Preferably, each of the one or more insulated electrical busses **143** preferably includes first

electrical quick-connector or at least three electrical outlet connectors exposed to an interior surface **134**, such as a first electrical quick connector **145** having one or more openings, such as electrical connector access **144** to access an uninsulated portion of one or more insulated electrical busses **143**, such as first electrical or outlet quick connector terminal **145**B(.**1**,.**2**,.**3**) electrically connected thereto first insulated electrical bus **143**B, second electrical or outlet quick connector terminal **145**W(.**1**,.**2**,.**3**) electrically connected thereto second insulated electrical bus **143**W, and third electrical or outlet quick connector terminal **145**G(.**1**,.**2**,.**3**) electrically connected thereto third insulated electrical bus **143**G. It is recognized herein that electrical quick-connectors **145** may be staggered thereon one or more insulated electrical busses **143** to enable electrical separation therebetween electrical quick connectors **145**.

Furthermore, ganged universal wall box **130**/**130**A may include one or more electrical interrupt, disrupt, disconnect, or on/off switch, such as bus switch **181** and more specifically bus switch **181**B, **181**W, and **181**G. Bus switch **181** may be positioned or incorporated anywhere along and electrically integrated in any of the one or more insulated electrical busses **143** (single switch bus), and alternatively one or more bus switch **181** may be positioned or incorporated anywhere along and electrically integrated in any of the one or more insulated electrical busses **143** (multi-switch bus), such as first insulated electrical bus **143**B, second insulated electrical bus **143**W, or third insulated electrical bus **143**G. For example, bus switch **181** may be positioned in or proximate bays **410** including one or more bays, such as first bay **411**, second bay **412**, and third bay **413**, shown in FIG. **7** to enable electrical interrupt, disrupt, disconnect, or on/off switch capability for individual bays **410** and interchangeable variety of electrical components or receptacles **120**, such as electrical switch **120**.**1**, electrical switch **120**.**2**, and electrical outlet **120**.**3** electrically connected therein each of bays **410** shown in FIG. **6**.

It is contemplated herein that bus switch **181** may be positioned or incorporated anywhere along and electrically integrated in any of the one or more first insulated electrical tap **153**, and alternatively one or more bus switch **181** may be positioned or incorporated anywhere along and electrically integrated in any of the one or more first insulated electrical tap **153**, such as first insulated electrical tap **153**B), second insulated electrical tap **153**W and third insulated electrical tap **153**G.

Referring again to FIG. **8** by way of example, and not limitation, therein is illustrated bus switch **181** shown in an open position however, bus switch **181** preferably includes a normally closed bus switch capable of opening and closing to interrupt or electrically connect one of insulated electrical busses **143** (multi-switch bus) therein ganged universal wall box **130**A/**130**, such as first insulated electrical bus **143**B via bus switch **181**B, second insulated electrical bus **143**W via bus switch **181**W, or third insulated electrical bus **143**G via bus switch **181**G. Bus switch **181** may be controlled by a controller, such as switch control **182** having control inputs via a wired control signal, such as electrical control **191** or via wireless communication signal, such as wireless control **192**, shown in FIG. **7**. Preferably switch control **182** receives a signal from electrical control **191** or wireless control **192** to open or close bus switch **181** and switch control **182** electrically opens or closes bus switch **181**, respectively. For example, if switch control **182** receives a signal from electrical control **191** or wireless control **192** to open bus switch **181**W then switch control **182** opens bus switch **181**W, thus electrically interrupting second insulated electrical bus **143**W and electrically disrupting power to one or more electrical components or receptacles **120** whether electrical switch **120**.**1**, electrical outlet **120**.**2** electrically connected therein each of bays **410** shown in FIG. **6** which are connected thereto electrical bus **143**W, and thus, powering off or interrupting universal wall box **130**/**130**A. Alternatively if switch control **182** receives a signal from electrical control **191** or wireless control **192** to open bus switch **181**B then switch control **182** opens bus switch **181**B, thus electrically interrupting second insulated electrical bus **143**B and electrically disrupting power to one or more electrical components or receptacles **120** whether electrical switch **120**.**1**, electrical outlet **120**.**2** electrically connected therein each of bays **410** shown in FIG. **6** which are connected thereto electrical bus **143**B, and thus, powering off or interrupting universal wall box **130**/**130**A. Electrical bus **143**B may be interrupter in a similar manner.

It is contemplated herein that a plurality of bus switch **181** may be electrically connected therein each of bays **410** shown in FIG. **6** for any of electrical bus **143**B/**143**W/**141**G to enable isolation and switching capabilities directed to a specific bay of bays **410** shown in FIG. **6**, such as, such as first bay **411**, second bay **412**, and third bay **413**, shown in FIG. **7** to enable electrical interrupt, disrupt, disconnect, or on/off switch capability for individual bays **410** and interchangeable variety of electrical components or receptacles **120**, such as electrical switch **120**.**1**, electrical switch **120**.**2**, and electrical outlet **120**.**3** electrically connected therein each of bays **410** shown in FIG. **6**.

Referring now to FIG. **9**, there is illustrated a flow diagram **900** of a method of utilizing universal wall box **130**/**130**A. In block or step **910**, providing universal wall box **130**/**130**A with electrical bus **143** and electrically connected thereto bus switch **181** (preferably a normally closed switch) controlled by switch control **182**. In block or step **915** receiving a signal from electrical control **191** or wireless control **192** to change a position of bus switch **181**, such as to electrically open or close bus switch **181**. In block or step **920** changing a position of bus switch **181**. In block or step **925** changing a position of bus switch **181** to electrically open, interrupt, disrupt, disconnect, or turn off switch capability for individual bays **410** and electrically interrupt, disrupt, disconnect, or turn off interchangeable variety of electrical components or receptacles **120**, such as electrical switch **120**.**1**, electrical switch **120**.**2**, and electrical outlet **120**.**3** electrically connected therein each of bays **410** shown in FIG. **6**. In block or step **930** changing a position of bus switch **181** to electrically close, enable, or turn on, or power on switch capability for individual bays **410** and enable, or turn on interchangeable variety of electrical components or receptacles **120**, such as electrical switch **120**.**1**, electrical switch **120**.**2**, and electrical outlet **120**.**3** electrically connected therein each of bays **410** shown in FIG. **6**.

The foregoing description and drawings comprise illustrative embodiments of the present invention. Having thus described exemplary embodiments of the present invention, it should be noted by those skilled in the art that the within disclosures are exemplary only, and that various other alternatives, adaptations, and modifications may be made within the scope of the present invention. Merely listing or numbering the steps of a method in a certain order does not constitute any limitation on the order of the steps of that method. Many modifications and other embodiments of the invention will come to mind to one skilled in the art to which this invention pertains having the benefit of the teachings presented in the foregoing descriptions and the associated drawings. Although specific terms may be employed herein,

they are used in a generic and descriptive sense only and not for purposes of limitation. Accordingly, the present invention is not limited to the specific embodiments illustrated herein, but is limited only by the following claims.

What is claimed is:

**1**. A universal wall box, said universal wall box comprising:

an open side electrical box having a plurality of sets of power wiring terminals integral to an exterior of one or more box surfaces of said electrical box, wherein each said set of power wiring terminals are electrically connected to one of a plurality of internal insulated distribution busses integrated within said one or more box surfaces of said electrical box, wherein at least one of said internal insulated distribution busses includes one or more bus switches, and wherein each of said internal insulated distribution busses includes one or more first quick-connector electrically connected thereto and exposed to an interior of said one or more box surfaces; and

a plurality of switch wiring terminals integral to said exterior of said one or more box surfaces of said electrical box, wherein each of said switch wiring terminals are electrically connected to one of a plurality of insulated electrical taps integrated within said one or more box surfaces of said electrical box, and wherein at least one of said plurality of insulated electrical taps includes at least one second quick-connector electrically connected thereto and exposed to an interior of said one or more box surfaces,

and wherein each of at least two or more of said plurality of insulated electrical taps is electrically connected to one of said plurality of internal insulated distribution busses via one of said one or more first quick-connector.

**2**. The universal wall box of claim **1**, further comprising one or more pluggable electrical receptacles, each of said one or more pluggable electrical receptacles includes two or more third quick-connectors configured to electrically connect each of said two or more third quick-connectors to said one or more first quick-connector or said at least one second quick-connector.

**3**. The universal wall box of claim **2**, further comprising a cover plate having at least two sets of apertures that includes at least one throughhole and at least one electrical receptacle.

**4**. The universal wall box of claim **2**, wherein said one or more pluggable electrical receptacles comprises an electrical switch having at least two electrical switch quick-connectors, including a first electrical switch quick connector and a second electrical switch quick connector.

**5**. The universal wall box of claim **4**, wherein said first electrical switch quick connector electrically connected to one of said one or more first quick-connector and said second electrical switch quick connector electrically connected to one of said at least one second quick-connector.

**6**. The universal wall box of claim **5**, wherein said one or more first quick-connector, includes a first connector access and said at least one second quick-connector includes a second connector access.

**7**. The universal wall box of claim **6**, wherein said first electrical switch quick-connector and second electrical switch quick-connector include one or more connector blades, including a first connector blade and a second connector blade.

**8**. The universal wall box of claim **7**, wherein said first connector blade and a second connector blade electrically connects to said first connector access and said second connector access.

**9**. The universal wall box of claim **8**, wherein said first connector blade and said first connector access are oriented different from said second connector blade and said second connector access.

**10**. The universal wall box of claim **2**, wherein said one or more pluggable electrical receptacles comprises an outlet having at least three electrical outlet quick connectors, including first electrical outlet quick connector, second electrical outlet quick connector, and third electrical outlet quick connector.

**11**. The universal wall box of claim **10**, wherein said first electrical outlet quick connector electrically connected to a first of said one or more first quick-connector, said second electrical outlet quick connector electrically connected to second of said one or more first quick-connector, said third electrical outlet quick connector electrically connected to third of said one or more first quick-connector.

**12**. The universal wall box of claim **11**, wherein said first electrical outlet quick connector, includes a first connector access, said second electrical outlet quick connector, includes a second connector access, and said second electrical outlet quick connector, includes a third connector access.

**13**. The universal wall box of claim **12**, wherein said first electrical outlet quick connector, second electrical outlet quick connector, and said second electrical outlet quick connector include one or more connector blades, including a first connector blade, a second connector blade, and a third connector blade.

**14**. The universal wall box of claim **13**, wherein said first connector blade electrically connected to said first connector access, said second connector blade electrically connected to said second connector access, and said third connector blade electrically connected to said third connector access.

**15**. The universal wall box of claim **1**, wherein said set of power wiring terminals further comprises a first power in terminal, second power in terminal, and a third power in terminal.

**16**. The universal wall box of claim **15**, wherein said set of power wiring terminals further comprises a first power out terminal, second power out terminal, and a third power out terminal.

**17**. The universal wall box of claim **16**, further comprising one or more power wires, each of said one or more power wires having a neutral power wire, a ground power wire and at least one hot power wire, wherein a first power wire of said one or more power wires includes a first said at least one hot power wire in electrical communication with said first power in terminal, a first said neutral power wire in electrical communication with said second power in terminal, and a first said ground power wire in electrical communication with said third power in terminal.

**18**. The universal wall box of claim **17**, wherein a second power wire of said one or more power wires includes a second said at least one hot power wire in electrical communication with said first power out terminal, a second said neutral power wire in electrical communication with said second power out terminal, and a second said ground power wire in electrical communication with said third power out terminal.

19. The universal wall box of claim 1, wherein said plurality of switch wiring terminals further comprises a first switch terminal, second switch terminal, and a third switch terminal.

20. The universal wall box of claim 19, further comprising at least one switch wire, each of said at least one switch wire having a neutral switch wire, a ground switch wire, and at least one hot switch wire, wherein said at least one hot switch wire in electrical communication with said first switch terminal, said neutral switch wire in electrical communication with said second switch terminal, and said ground switch wire in electrical communication with said third switch terminal.

21. The universal wall box of claim 1, further comprising a switch control configured to change a position of said one or more bus switches.

22. The universal wall box of claim 21, wherein said switch control is configured to change at least one of said one or more bus switches to an open position.

23. The universal wall box of claim 21, wherein said switch control is configured to receive a control signal.

24. A ganged universal wall box, said ganged universal wall box comprising:

an open side electrical box having a plurality of sets of power wiring terminals integral to an exterior of one or more box surfaces of said electrical box, wherein each said set of power wiring terminals are electrically connected to one of a plurality of internal insulated distribution busses integrated within said one or more box surfaces of said electrical box, wherein at least one of said internal insulated distribution busses includes one or more bus switches, and

one or more bays within said open side electrical box, each said bay includes:

one or more first quick-connector electrically connected thereto said internal insulated distribution busses and exposed to an interior of said one or more box surfaces; and

a plurality of switch wiring terminals integral to said exterior of said one or more box surfaces of said electrical box, wherein each of said switch wiring terminals are electrically connected to one of a plurality of insulated electrical taps integrated within said one or more box surfaces of said electrical box, and wherein at least one of said plurality of insulated electrical taps includes at least one second quick-connector electrically connected thereto and exposed to an interior of said one or more box surfaces,

and wherein each of at least two or more of said plurality of insulated electrical taps is electrically connected to one said plurality of internal insulated distribution busses via one of said one or more first quick-connector.

25. The ganged universal wall box of claim 24, further comprising one or more pluggable electrical receptacles, each of said one or more pluggable electrical receptacles includes two or more third quick connectors configured to electrically connect each of said two or more third quick connectors to said one or more first quick-connector or said at least one second quick-connector.

26. The ganged universal wall box of claim 25, further comprising a cover plate having at least two sets of apertures that includes at least one throughhole and at least one electrical receptacle.

27. The universal wall box of claim 24, further comprising a switch control configured to change a position of said one or more bus switches.

28. The universal wall box of claim 27, wherein said switch control is configured to change at least one of said one or more bus switches to an open position.

29. The universal wall box of claim 27, wherein said switch control is configured to receive a control signal.

30. A method of powering on and off a universal wall box, said method comprising the steps of:

providing an open side electrical box having a plurality of sets of power wiring terminals integral to an exterior of one or more box surfaces of said electrical box, wherein each said set of power wiring terminals are electrically connected to one of a plurality of internal insulated distribution busses integrated within said one or more box surfaces of said electrical box, wherein at least one of said internal insulated distribution busses includes one or more bus switches, and wherein each of said internal insulated distribution busses includes one or more first quick-connector electrically connected thereto and exposed to an interior of said one or more box surfaces; and a plurality of switch wiring terminals integral to said exterior of said one or more box surfaces of said electrical box, wherein each of said switch wiring terminals are electrically connected to one of a plurality of insulated electrical taps integrated within said one or more box surfaces of said electrical box, and wherein at least one of said plurality of insulated electrical taps includes at least one second quick-connector electrically connected thereto and exposed to an interior of said one or more box surfaces, and wherein each of at least two or more of said plurality of insulated electrical taps is electrically connected to one of said plurality of internal insulated distribution busses via one of said one or more first quick-connector, and comprising a switch control configured to change a position of said one or more bus switches; and

changing a position of said one or more bus switches.

31. The method of claim 30, further comprising the step of receiving a control signal therein said switch control.

32. The method of claim 31, further comprising the step of changing a position of said one or more bus switches to an open position based on said control signal.

33. The method of claim 31, further comprising the step of changing a position of said one or more bus switches to a closed position based on said control signal.

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